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# PATENT ABSTRACTS OF JAPAN

(11)Publication number:

2001-304830

(43) Date of publication of application: 31.10.2001

(51)Int.CI.

G01B 11/26

(21)Application number: 2000-117561

G01P 3/36

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(22)Date of filing:

19.04.2000

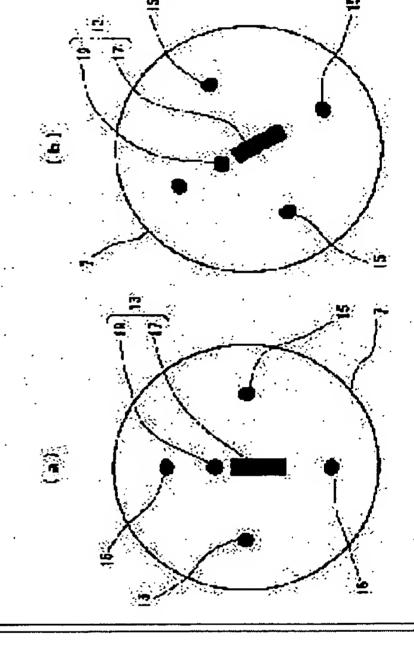
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### (54) ROTARY MOTION MEASURING METHOD AND MEASURING APPARATUS FOR SPHERE

### (57)Abstract:

PROBLEM TO BE SOLVED: To provide a rotary motion measuring method for a sphere capable of automatically measuring the rotary motion, and hardly disabling measurement even in the case where rotation is made in plural directions.

SOLUTION: A flying sphere is photographed twice at interval of designated time, and the rotary motion of the sphere is measured by image processing from a recognition mark on the surface of the sphere using two obtained static images. The recognition mark is formed by a center mark 13 having polarity and a rotating angle calculation mark 15 disposed to surround the center mark. The center mark 13 is formed by a rectangle 17, and a circle 19 apart from the rectangle 17 and adjacent to one short side of the rectangle 17. Three or more rotating angle calculation marks 15 are provided. The respective center positions of the rotating angle calculation marks 15 are existent within a range 13 mm to 17 mm apart from the center mark 13.



## **LEGAL STATUS**

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

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